

**Amendments to the Specification**

Please replace paragraph [0037] (the paragraph that starts at page 8, line 21) with the following amended paragraph:

5 ~~Figures 5A-D~~ illustrate the correlation of foot cycle, that is from foot-strike to angular displacement point, to angle  $[(\ )]$  ( $\theta$ ) of redirection of energy into maximum linear momentum for and embodiment for short-distance sprints, such as a 100m race (5A), to mid-to-long distance sprints, such as a 800m race (5B), mid-distance running, such as a 1,500 race (5C) and long-distance running, such as jogging (5D).

10 Please replace paragraph [0042] (the paragraph that starts at page 10, line 17) with the following amended paragraph:

A2  
15 Foot-strike member 102 is generally made of any conventional dense, semi-deformable, wear resistant material, such as synthetic polymers and plastics of any sort, having sufficient compliance and resiliency features to adequately absorb a relative portion of impact forces imparted to the shoe and body of the runner upon initial contact with a supporting surface. Various embodiments of the present invention may employ materials that are more suitable for that particular application. For example, an embodiment for distance running may utilize a material for foot-strike member 102 having greater indices of compliancy and resiliency than an embodiment for sprinting. Foot-strike member 102 comprises a front zone 112 extending towards toe section 126 and a rear zone 114  
20 extending towards heel section 120. In preferred embodiments, front zone of foot-strike member 112 is arcuately formed to follow the natural anatomical features of the foot, but alternative embodiments also include additional configurations (DT—IDEAS?) and foot-strike member rear zone 114 generally follows the anatomical margins of the foot, such as the arch and heel. Foot-strike member 102 may be situated in any location along the  
25 longitudinal axis (X axis) of sole 100 with front zone 112 extending into forefoot section 124 rear zone 114 extending into heel section 120 and may encompass the entire heel 120 to forefoot 124 sections, and/or any region there between. The medial 108 and lateral 110 margins of foot-strike member 102 generally follow the natural contours of the foot,

A2 and in embodiments wherein foot-strike member 102 extends rearwardly to the heel, foot-strike member 102 generally follows the contour of the heel.

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Please replace paragraph [0055] (the paragraph that starts at page 18, line 9) with the following amended paragraph:

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- 5 These principles are more clearly presented in Figures 5A-D, which illustrate the correlation of a foot cycle, herein defined as being from initial foot-strike to angular displacement point, to angle of redirection of energy  $[(\ )]$   $(\theta)$  into maximum linear momentum. In general, the angle of displacement required for maximal redirection of energy is directly related to the type and speed of running and the faster the running
- 10 speed, the greater the angle of displacement becomes. For example, embodiments designed for short-distance sprints, such as a 100m race (Fig. 5A) have a comparatively low foot cycle radius (r), whereas embodiments designed for long-distance running (Fig. 5D) have a relatively large foot cycle radius (r'). Furthermore, foot cycle radius (R) is inversely proportional to the angle of redirection of energy  $[(\ )]$   $(\theta)$ . In other words,
- 15 embodiments designed for short-distance sprinting (Fig. 5A) require a larger angular displacement profile 170.